AND BEVERAGES
426/31

RECORDED

A.D. 1880, 1st OCTOBER. N° 3975.

Fermented or Aërated Liquors or Beers.

LETTERS PATENT to Joseph Addey Fawcett, of Wakefield, in the County of York, Corn Miller, for an Invention of "IMPROVEMENTS IN THE PRODUCTION OF FERMENTED OR AËRATED LIQUORS OR BEERS."

PROVISIONAL SPECIFICATION left by the said Joseph Addey Fawcett at the Office of the Commissioners of Patents on the 1st October 1880.

JOSEPH ADDEY FAWCETT, of Wakefield, in the County of York, Corn Miller. "IMPROVEMENTS IN THE PRODUCTION OF FERMENTED OR AËRATED LIQUORS OR BEERS."

This Invention relates, firstly, to the manufacture of a fermented liquor or beer from the bran or husk, sharps, middlings, or seconds produced in the grinding of wheat and other grain or seeds. These substances contain a great proportion of starch, gluten, and nitrogenous matter, and may be brewed with the addition of sufficient sugar to promote fermentation.

Secondly. The Invention relates to the use of the above named substances in combination with malt, or malt and sugar, or other substances capable of being converted into beer. It is well known that malt contains more diastaste than is requisite for the conversion of its own starch into sugar or saccharine, therefore by adding a suitable quantity of bran, sharps, middlings, or seconds, the diastaste is provided with additional starch to act upon, and sugar or saccharine produced at a cheaper rate than if malt alone were used.

The addition of bran or sharps is also useful to prevent the "mash" from setting or becoming locked-up, and thereby renders it more easy to "sparge."

[*Price 4d.*]

SPECIFICATION in pursuance of the conditions of the Letters Patent filed by the said Joseph Addey Fawcett in the Great Seal Patent Office on the 1st March 1881.

JOSEPH ADDEY FAWCETT, of Wakefield, in the County of York, Corn Miller. "IMPROVEMENTS IN THE PRODUCTION OF FERMENTED OR AËRATED LIQUORS OR BEERS."

This Invention relates,—

Firstly. To the manufacture of a fermented liquor or beer from the bran, hush, chaff, sharps, or fibrous portions generally, and also the middlings or seconds (which when purified are called semolina) produced in the grinding of wheat, maize, rice, buckwheat, and other grains, seeds, or serials, which yield a large percentage of starch, or in the manufacture of pot and pearl barley. These substances may be brewed with a sufficient quantity of sugar and yeast to promote fermentation, and the liquor thus produced may if desired be aerated. The above substances may consist of the materials so designated, which result from the ordinary operations of grinding or other operations which the grain or seed is subjected to for commercial purposes; but if specially prepared for the purpose of brewing, then the grain or seed may be ground, or crushed, or otherwise reduced (by any of the processes by which wheat is reduced), so as to leave as much of the starch or nitrogeneous constituents of the grain adhereing to the bran or husk as may be found requisite. In this condition the grain or seed will be in a flattened or flaky state, and completely exposed to the action of diastaste. In some cases it may be found advantageous to use only the granular portions of the grain or the semolina without the bran or husk, in which cases the grain should be reduced by a process favorable to the formation of granules, and any fine, or floury, or meal and dusty portions rejected, which would otherwise cause the brew to set or form an impalpable paste.

Secondly. The Invention relates to the use of the above named substances in combination with malt, or malt and sugar, or other saccharine substance capable of being converted into saccharine, and therefore into ale, porter, stout, or beer.

It is well known that malt contains more diastaste than is requisite for the conversion of its own starch into sugar or saccharine, therefore by adding a suitable quantity of bran or other constituent hereinbefore mentioned the diastaste is provided with additional starch to act upon, and sugar or saccharine produced at a cheaper rate than if malt alone were used.

Thirdly. My improvements consist in the use of the fibrous portions of grain or seed as an addition or in combination with malt, raw grain, and other substances for the production of fermented liquors or beers as a mechanical agent only, without special reference to the chemical action thereof. The mixture of such substances with the mash renders the same more easy to sparge by keeping it loose or spongy, and the use of a bed thereof placed in a false bottom under the mash tun or vessel acts to a certain extent as a filter.

By mixing the substances herein referred to with the malt, the latter may be rolled or ground more completely than has heretofore been found convenient on account of its liability to form a pasty or impermeable mass when used by itself.

Having thus described the nature of my Invention, and the manner in which the same is to be or may be carried into practice, I would have it understood that I am aware that entire grain has been used for brewing purposes, and therefore do not claim for the whole or entire grain, or for the finer, or nongranulated, or meal, or floury portions produced in the reduction thereof; but what I claim as my Invention and consider to be new is,—

Firstly. The use of the fibrous or granular portions of wheat, maize, rice, barley,

and other grains, seeds, or serials for the production of a fermented liquor or beer, as described in the first part of the foregoing Specification.

Secondly. The use of the above materials or any of them in combination with malt, sugar, or saccharine substance, or other substance capable of being converted into saccharine, as and for the purpose described in the second part thereof.

Thirdly. The use in combination with or in addition to malt of the fibrous or cellulose portions of grain and seeds for the purpose of keeping the mash loose, and as a mechanical agent to facilitate the spargeing or filtering of fermented liquors, such as ale, porter, and beer.

In witness whereof, I, the said Joseph Addy Fawcett, have hereunto set my hand and seal, this Twenty-nineth day of March, in the year of our Lord One thousand eight hundred and eighty one.

JOSEPH ADDY FAWCETT. (L.S.)

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